

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of the claims in this application:

Listing of Claims

1. (Currently amended) An arrangement for producing a blank made of powder, ~~preferably titanium powder,~~ intended for a dental crown or other product for the human body ~~(spacer, dental bridge, implant, etc.)~~ and comprising at least one first apparatus for powder compression and at least one second apparatus with one or more elastic molds having at least one cavity for a punch ~~(block)~~ and the powder used in the initial stage, here referred to as the starting powder, ~~characterized in that~~ wherein the first apparatus comprises a machine operating by impact compaction, and ~~in that~~ wherein said mold or molds is/are arranged, when the cavity is filled with starting powder, to receive one or more impacts effected by the impaction members in the machine and, as a function of the impact or impacts, to generate an isostatic action during compression/ compaction.

2. (Currently amended) The arrangement as claimed in ~~patent~~ claim 1, ~~characterized in that~~ wherein the machine/its machine and the impaction members operate with a high impaction energy, namely energy (energies) in excess of 900 Nm (Newton meters), ~~for example energy (energies) chosen in the range of 1200-1800 Nm.~~

3. (Currently amended) The arrangement as claimed in ~~patent~~ claim 1 ~~or 2~~, ~~characterized in that~~ wherein the mold or molds have a high degree of softness, and ~~for example~~ have a Shore number in the range of 10-40, ~~preferably 15-20.~~

4. (Currently amended) The arrangement as claimed in ~~patent~~ claim 1, ~~2 or 3~~, ~~characterized in that~~ wherein the compacted blank, the dental crown or the product has a ~~high density (theoretical density), preferably~~ a density of over 95%.

5. (Currently amended) The arrangement as claimed in ~~any of the preceding patent claims claim 1, characterized in that~~ wherein the mold or molds comprise or consist of silicone (~~DG-A-Sil; DUBLISIL 15~~).

6. (Currently amended) The arrangement as claimed in ~~any of the preceding patent claims claim 1, characterized in that~~ wherein the titanium powder consists of Wah Chang HP (~~or CP~~) -325 Mesh or Wah Chang CP - 325 Mesh.

7. (Currently amended) The arrangement as claimed in ~~any of the preceding patent claims claim 1, characterized in that~~ wherein the punch (~~block~~) has a narrowed or waist-shaped portion.

8. (Currently amended) The arrangement as claimed in ~~any of the preceding patent claims claim 1, characterized in that~~ wherein the mold comprises top and bottom molds which can be applied in a recess in a die, ~~in that~~ wherein the top and bottom molds are arranged with a first space positioning of the punch, ~~in that~~ wherein at least one mold of the top and bottom molds has a second space for the powder, ~~in that~~ wherein the top and bottom molds can cooperate in said recess with upper and lower stamps or with a stamp or a support, via their end surfaces, and ~~in that~~ wherein, upon activation of the stamps against one another, or upon activation of the stamp against the support, there is a substantially uniform pressing of the powder against the outer surface of the punch.

9. (Currently amended) The arrangement as claimed in ~~patent claim 8, characterized in that~~ wherein a slide-promoting agent is applied in the recess for the top and bottom molds.

10. (Currently amended) A device for substantially reducing or eliminating the need for sintering of a blank comprising or consisting of powder material and intended for a dental crown or other product for the human body, ~~for example a spacer, dental bridge, implant, etc., characterized in that~~ wherein, by means of impact compaction with a high

energy per unit of time, the blank has a ~~substantial density, preferably~~ a density of ca. 98% or higher.

11. (Currently amended) A method for producing a blank made of powder and intended for a dental crown or other product for the human body, ~~characterized by the following production steps~~

a) ~~production of~~ producing or ~~selection~~ selecting a punch (~~block~~) with an outer shape corresponding to the inner shape of the blank,

b) ~~application of~~ applying the punch and starting powder in the inner space of the mold of elastic material,

c) ~~application of~~ applying the mold with the punch and the starting powder in an impact-type compaction machine,

d) ~~transfer of~~ transferring high energy per unit of time to the mold in the machine,

e) ~~distribution of~~ distributing the transmitted energy by means of an isostatic function which is generated by means of the mold,

f) ~~sintering of~~ the compressed powder for a ~~relatively short time, preferably a~~ time of 30 minutes to 2 hours, in a sintering unit operating with or without a vacuum function.

12. (Currently amended) A product in the form of a blank for a dental crown or other product for the human body, ~~for example a spacer, implant, dental bridge, etc., and comprising compressed powder, preferably titanium powder, characterized in that wherein~~ the blank has a high density, ~~for example a (theoretical density)~~ of 90% or higher.

13. (Currently amended) The product as claimed in ~~patent~~ claim 12, ~~characterized in that~~ wherein the density is chosen in the range of 95-99.5%.

14. (Currently amended) Use of a blank for a dental crown or other product for the human body comprising or consisting of compressed or compacted material powder, ~~preferably titanium powder, characterized in that~~ wherein an impact-type compaction machine effecting a high energy per unit of time is used for compressing compacting the powder.

15. (New) The arrangement of claim 1, wherein the powder is a titanium powder.

16. (New) The arrangement of claim 2, wherein the compaction energy is in the range of 1200-1800 Nm.

17. (New) The arrangement of claim 3, wherein the mold or molds have a Shore number in the range of 15-20.

18. (New) The use of claim 14, wherein the powder comprises a titanium powder.